

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A55NM Revision 4 AvCraft Aerospace GmbH Dornier Model 328-300 March 2, 2004

FAA TYPE CERTIFICATE DATA SHEET NO. A55NM

This data sheet which is part of Type Certificate No. A55NM prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the US Federal Aviation Regulations.

Type Certificate Holder AvCraft Aerospace GmbH
 Post Box 1252
 D-82231 Wessling
 Federal Republic Of Germany

1. Model Dornier 328-300 (Transport Category Airplane) approved July 15, 1999

1.1 MTOW Increase (Mod 10)

Major modification "Mod 10", which is covered by Dornier Change Notice CN-F0053, was approved by FAA on April 17, 2000. The following data are valid for both the basic 328-300 aircraft, as well as for Mod 10 aircraft, except where specifically noted.

1.2 Flight Level 350 Option

Major modification covered by Dornier Change Notice CN-F0166, was approved by FAA on March 26, 2001. The following data are valid for both the basic 328-300 aircraft, as well as for aircraft incorporating Change Notice CN-F0166, except where specifically noted.

Engines 2 Pratt and Whitney of Canada Ltd. PW 306B turbofan engines. Refer to engine FAA-Type Certificate E35NE.

Auxiliary Power Unit One Allied Signal 36-150. For details refer to AFM No. AM-AFM-050599-ENV, Section 02-06-00, page 6.

Fuel (a) Specifications:
 ASTM (D 1655) Jet A
 ASTM (D 1655) Jet A1
 ASTM (D 1655) Jet A-2
 IATA Kerosene Type Fuel

 (b) Additives:
 According to Dornier 328-300 Aircraft Maintenance Manual Document No. TM-AMM-010399-ENV.

Oil Types of approved oils for use in PW 306B engines are:
 - 5 Centistoke oils (conforming to specification PWA 521, Type II).
 - Third generation oils.

Engine Model PW306B Limits Refer to AFM No. AM-AFM-050599-ENV

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<u>Airspeed Limits (I.A.S.)</u>	V_{MO}	270 KIAS from sea level to 8,000 ft increasing linearly to 300 KIAS at 10,000 ft
	V_{MO}	300 KIAS from 10,000 ft to 20,700 ft
	M_{MO}	0.66 from 20,700 ft to 31,000 ft
	V_A (Maneuvering)	190 KIAS from sea level to 31,000ft.
	V_{FE} (Flaps Extended)	12° 200 KIAS for Basic 12° 205 KIAS for Mod 10 20° 180 KIAS 32° 160 KIAS
	$V_{LE} = V_{LO}$	200 KIAS
	Tire Speed	210 MPH
	Windshield wiper operating speed	166 KIAS
<u>Datum</u>	The aircraft reference zero datum point (QE 0) is located 59.05 in. (1,500 mm) forward of the fuselage nose cone and 98.425 in. under the fuselage centerline and the aircraft buttock line. The 0% MAC datum is located 369.21 in. (9.378m) aft of the reference datum (QE 0).	
<u>Mean Aerodynamic Chord</u>	The MAC length is 80.20 in. (2.037 m)	
<u>Leveling Means</u>	Measuring marks are provided on the aircraft for leveling. These marks are indicated by special rivets or drillings as shown and described in the Weight & Balance Manual, Document No. TM-WBM-010399-ENV.	
<u>Maximum Weights</u>	<u>For Basic</u> Max Ramp Weight: 33841 lb. (15350 kg) Max Takeoff Weight: 33510 lb. (15200 kg) Max Landing Weight: 31063 lb. (14090 kg) Max Zero Fuel Weight: 27800 lb. (12610 kg) <u>For Mod 10</u> Max Ramp Weight: 34789 lb. (15780 kg) Max Takeoff Weight: 34524 lb. (15660 kg) Max Landing Weight: 31724 lb. (14390 kg) Max Zero Fuel Weight: 28814 lb. (13070 kg)	
<u>Center of Gravity Limits</u>	Refer to AFM No. AM-AFM-050599-ENV	
<u>Minimum Crew</u>	2 - Pilot and copilot	
<u>Maximum Passenger Seating Capacity</u>	33	
<u>Type of Baggage Compartment</u>	Class "D" Compartment (rear)	
<u>Maximum Baggage</u>	Total of 1653 lbs (750 kg) in the rear baggage compartment - 882 lbs (400 kg) in the forward part - 771 lbs (350 kg) in the aft part - max. floor loading = 75 lb/ft ²	
<u>Fuel Capacity</u>	7970 lbs usable (gravity refueled) 7800 lbs usable (pressure refueled)	

Oil Capacity

Oil capacity per Engine

	MAX OIL TANK	MIN OIL TANK
US Gallons	2.11	0.79
Liters	8.00	3.00

Maximum Operating Altitude

31,000 ft. for basic aircraft
35,000 ft. for aircraft incorporating Change Notice CN-F0166

Control Surface Movements

Wing Flaps	12°, 20°, and 32°
Ailerons	28° up ($\pm 1^\circ$), 25° down (+1°)
Elevator	30° up (-2°), 25° down (-1°)
Stabilizer	fixed
Rudder	24° right (+1°), 24° left (-1°)

Serial Numbers

Serial Numbers for Basic: 3105 up to and including 3144, 3146, 3148, 3151, 3152, 3153, 3154, 3158, 3159
Serial Numbers for Mod 10: 3145, 3147, 3149, 3150, 3155, 3156, 3157, 3160 and subsequent

Import Requirements

To be considered eligible for operation in the United States, each aircraft manufactured under this type certificate must be accompanied by a certificate of airworthiness for export or certifying statement endorsed by the exporting foreign civil airworthiness authority which states (in the English language): This aircraft conforms to its U.S. Type Design (Type Certificate No. A55NM) and is in a condition for safe operation.

Certification Basis

14 CFR part 25 Effective February 1, 1965, including Amendments 25-1 through 25-87. Additionally, Dornier elected to comply voluntarily with §25.351 as amended by Amendment 25-91.

For aircraft incorporating Flight Level 350 modification (Change Notice CN-F0166), Dornier elected to comply voluntarily with §25.832 as amended by Amendment 25-94.

Special Conditions:

- No. ANM-99-273, "High Intensity Radiated Fields (HIRF) Protection.

Exemptions:

- No. 6895 for FAR 25.1435(b)(1) Hydraulic System Test
- No. 6900 for FAR C36.9(e)(1) Approach Speed for Noise

Equivalent Level of Safety Findings:

- Use of 1g Stall Criteria (various FARs)
- Rejected Takeoff and Landing Performance Criteria (FAR 25.101, 25.105, 25.109, 25.113, 25.115, 25.735, and 25.1587)
- Lavatory Fire Protection (FAR 25.854(a))
- Flight crew top hatch emergency exit markings (FAR 25.811(f))

Optional Requirements complied with:

- FAR 25.1419 Icing

Environmental Standards complied with:

- FAR Part 36 effective December 1, 1969, including Amendments 36-1 through 36-21.
- FAR Part 34 effective September 10, 1990, including Amendment 34-1 through 34-3.

Additional Design Requirements complied with per FAR 21.21(b)(2):

- Ice Contaminated Tailplane Stall (Issue Paper F-3)
- Roll Control in Supercooled Large Droplet Conditions (Issue Paper S-2)

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see the Certification Basis) must be installed in the aircraft. The lists of all equipment as well as optional approved equipment are contained in the document:

Type Design Definition Document No. TD-F0300

Airplane Flight Manual

LBA approved Airplane Flight Manual AM-AFM-050599-ENV.

Service Information

Service bulletins, repair instructions (letters, drawings, specifications, forms used for transmitting repair descriptions, etc.), structural repair manuals, airplane flight manuals, vendor manuals, and overhaul and maintenance manuals that are published in the English language and indicate applicability to the U.S. approved type designs included in this Type Certificate and that include a statement "LBA Approved" are accepted by the FAA and are considered "FAA Approved."

Additionally, Dornier as an LBA Approved Design Organization has been given authorization by the LBA to approve Service Bulletins, including special types (Alert Service Bulletin, All Operator Telefax, Engineering Order). Accordingly, Service Bulletins and repair instructions which contain a statement such as "This Service Bulletin is approved under the authority of LBA approved design organization No. LBA.JA.002" are considered LBA approved and are therefore accepted by the FAA and are considered FAA approved.

NOTES

NOTE 1. Current weight and balance report including a list of equipment included in certificated empty weight, and loading instructions when necessary must be provided for each aircraft at its delivery.

For further information see Weight & Balance Manual TM-WBM-010399-ENV

NOTE 2. Airworthiness Limitations including structural inspections and retirement times for safe-life parts are listed in Dornier Airworthiness Limitations Document TM-ALD-010599-ALL.

NOTE 3. Certification Maintenance Requirements (CMR) are listed in Document TM-CMR-010599-ALL. The CMR Document is attached as an appendix to the MRB Document TM-MRB-010599-ALL.

NOTE 4. Compliance with the optional ditching requirements of FAR 25.801, FAR 25.1411, and FAR 25.1415 has not been shown.

NOTE 5. Effective June 15, 2000, Dornier Luftfahrt GmbH was renamed to Fairchild Dornier GmbH. The new name will appear as of this date on all documents. However, documents bearing the old name will remain valid and will be updated when and where necessary.

NOTE 6. Effective July 28, 2003, Fairchild Dornier GmbH was renamed to AvCraft Aerospace GmbH. The new name will appear as of this date on all documents. However, documents bearing the old name will remain valid and will be updated when and where necessary.

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